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PTO/SB/05 (03-01)

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# UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR § 1.53(b))

Attorney Docket No.	1875.0250002/RES/AJF
First Inventor	Juin-Hwey Chen
Title	Noise Feedback Coding Method and System for Efficiently Searching Vector Quantization Codevectors Used for Coding a Speech Signal
Express Mail Label No.	

## APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

## ADDRESS TO:

Assistant Commissioner for Patents  
Box Patent Application  
Washington, DC 20231

1. ☒ Fee Transmittal Form (e.g., PTO/SB/17)  
(Submit an original, and a duplicate for fee processing)
2. ☐ Applicant claims small entity status.  
See 37 CFR 1.27.
3. ☒ Specification [Total Pages 96]  
(preferred arrangement set forth below)  
- Descriptive title of the Invention  
- Cross Reference to Related Applications  
- Statement Regarding Fed sponsored R & D  
- Reference to sequence listing, a table, or a computer program listing appendix  
- Background of the Invention  
- Brief Summary of the Invention  
- Brief Description of the Drawings (if filed)  
- Detailed Description  
- Claim(s)  
- Abstract of the Disclosure
4. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets 34]
5. Oath or Declaration [Total Pages 2]  
a. ☒ Newly executed (original or copy)  
b. ☐ Copy from a prior application (37 CFR 1.63(d))  
(for continuation/divisional with Box 18 completed)  
i. ☐ **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR §§ 1.63(d)(2) and 1.33(b).
6. ☒ Application Data Sheet. See 37 CFR 1.76.

7. ☐ CD-ROM or CD-R in duplicate, large table or Computer Program  
(Appendix)
8. Nucleotide and/or Amino Acid Sequence Submission  
(if applicable, all necessary)  
a. ☐ Computer Readable Form (CRF)  
b. Specification Sequence Listing on:  
i. ☐ CD-ROM or CD-R (2 copies); or  
ii. ☐ paper  
c. ☐ Statements verifying identity of above copies

11046 U.S. PTO  
09/832132  
04/11/01

## ACCOMPANYING APPLICATION PARTS

9. ☒ Assignment Papers (cover sheet & document(s))
10. ☒ 37 CFR 3.73(b) Statement ☒ Power of Attorney From Assignee  
(when there is an assignee)
11. ☐ English Translation Document (if applicable)
12. ☐ Information Disclosure Statement (IDS)/PTO-1449 ☐ Copies of IDS Citations
13. ☐ Preliminary Amendment
14. ☒ Two Return Receipt Postcards (MPEP 503)  
(Should be specifically itemized)
15. ☐ Certified Copy of Priority Document(s)  
(if foreign priority is claimed)
16. ☐ Nonpublication Request under 35 U.S.C. 122 (b)(2)(B)(i). Applicant must attach form PTO/SB/35 or its equivalent.
17. ☒ Other: Authorization under 37 C.F.R. § 1.136(a)(3)  
☒ Other: The name of the assignee is: Broadcom Corporation

18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76:

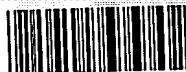
☐ Continuation ☐ Divisional ☒ Continuation-in-Part (CIP) of prior application No: 09/722,077  
Prior application information: Examiner To be assigned Group/Art Unit: 2644

For CONTINUING OR DIVISIONAL APPS only: The entire disclosure of the prior application, from which an oath or declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. The incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts.

## 19. CORRESPONDENCE ADDRESS

☒ Customer Number or Bar Code Label

Customer No. 26111



or ☐ Correspondence address below

(Insert Customer No. or Attach bar code label here)

NAME	STERNE, KESSLER, GOLDSTEIN & FOX P.C.				
	Attorneys at Law				
ADDRESS					
CITY		STATE		ZIP CODE	
COUNTRY		TELEPHONE		FAX	

NAME (Print/Type)	Albert J. Fasulo, II	Registration No. (Attorney/Agent)	43,607
SIGNATURE	<u>Albert J. Fasulo II</u>	Date	April 11, 2001

STERNE, KESSLER, GOLDSTEIN & FOX P.C.

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J1046 U.S. PTO  
09/832132  
04/11/01

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April 11, 2001

WRITER'S DIRECT NUMBER:  
(202) 312-7261

INTERNET ADDRESS:  
AFASULO@SKGF.COM

Commissioner for Patents  
Washington, D.C. 20231

**Box Patent Application**

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)  
(Continuation-in-Part of Appl. No. 09/722,077; Filed: November 27, 2000)

Appl. No. To be assigned; Filed: HERewith

For: **Noise Feedback Coding Method and System for Efficiently Searching  
Vector Quantization Codevectors Used for Coding a Speech Signal**

Inventor: Juin-Hwey Chen

Our Ref: 1875.0250002/RES/AJF

Sir:

The following documents are forwarded herewith for appropriate action by the U.S.  
Patent and Trademark Office:

1. PTO Fee Transmittal (Form PTO/SB/17) (*in duplicate*);
2. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
3. U.S. Utility Patent Application entitled:

**Noise Feedback Coding Method and System for Efficiently Searching Vector  
Quantization Codevectors Used for Coding a Speech Signal**

and naming as inventor:

Commissioner for Patents

April 11, 2001

Page 2

Juin-Hwey Chen

the application consisting of:

- a. A specification containing:
    - i. 82 pages of description prior to the claims;
    - ii. 13 pages of claims (47 claims);
    - iii. a one (1) page abstract;
  - b. 34 sheets of Formal Drawings: (Figures: 1, 1A, 2, 2A, 3-5, 5A, 6, 6A, 6B, 7-12, 13A, 13B, 13C, 13D, 13E, 14A, 14B, 14C, 14D, 14E, 15A, 15B, 16A, 16B, 17-19); and
  - c. An original executed Declaration;
4. Authorization to Treat a Reply As Incorporating An Extension of Time Under 37 C.F.R. § 1.136(a)(3) (*in duplicate*);
  5. Recordation Form Cover Sheet (PTO-1595);
  6. An original executed Assignment to Broadcom Corporation, recordation of which is hereby respectfully requested;
  7. An original executed Power of Attorney from Assignee;
  - ✓ 8. A Certificate under 37 C.F.R. § 3.73(b) from Assignee with a copy of the Assignment attached;
  9. Application Data Sheet (37 C.F.R. § 1.76);
  10. Our **Check No. 30939** for **\$1,236.00** to cover:
    - \$ 710.00 Filing fee for patent application;
    - \$ 486.00 Excess claims fee;
    - \$ 40.00 Assignment recordation fee; and
  11. Two (2) return postcards.

Commissioner for Patents

April 11, 2001

Page 3

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible. The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036. A duplicate copy of this letter is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Albert J. Fasulo, II  
Attorney for Applicant  
Registration No. 43,607

Enclosures

RES/AJF:vrh  
P:\Users\AFASULO\1875\0250002\NewAppl-ptoltr  
SKGF Rev. 8/1/00 mac

**FEE TRANSMITTAL  
for FY 2001**

Patent fees are subject to annual revision.

**TOTAL AMOUNT OF PAYMENT** (\$)**1,236.00****Complete if Known**

Application Number	To be assigned
Filing Date	HEREWITH
First Named Inventor	Juin-Hwey CHEN
Examiner Name	To be assigned
Group Art Unit	To be assigned
Attorney Docket No.	1875.0250002/RES/AJF

**METHOD OF PAYMENT (check one)**

- 1.
- ☐
- The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:

Deposit Account Number	19-0036
Deposit Account Name	Sterne, Kessler, Goldstein & Fox P.L.L.C.

- ☐
- Charge Any Additional Fee Required Under 37 CFR §§ 1.16 and 1.17

- ☐
- Applicant claims small entity status See 37 CFR 1.27

- 2.
- ☒
- Payment Enclosed:

☒ Check ☐ Credit card ☐ Money Order ☒ Other\*

\*Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036.

**FEE CALCULATION****1. BASIC FILING FEE**

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description	Fee Paid
101	710	201	355	Utility filing fee	710.00
106	320	206	160	Design filing fee	
107	490	207	245	Plant filing fee	
108	710	208	355	Reissue filing fee	
114	150	214	75	Provisional filing fee	

**SUBTOTAL (1) (\$)** 710.00**2. EXTRA CLAIM FEES**

Extra	Fee from below	Fee Paid
Total Claims 47 - 20** = 27	X 18.00	= 486.00
Indep. Claims 3 - 3** = 0	X	= 0.00
Multiple Dependent		= 0.00

Large Fee Code	Entity Fee (\$)	Small Fee Code	Entity Fee (\$)	Fee Description
103	18	203	9	Claims in excess of 20
102	80	202	40	Independent claims in excess of 3
104	270	204	135	Multiple dependent claim
108	80	209	40	**Reissue independent claims over original patent
110	18	210	9	**Reissue claims in excess of 20 and over original patent

**SUBTOTAL (2) (\$)** 486.00

\*\* or number previously paid, if greater. For Reissues, see above

**FEE CALCULATION (continued)****3. ADDITIONAL FEES**

Large Entity Small Entity

Fee Code	Fee (\$)	Fee Code	Fee (\$)	Fee Description	Fee paid
105	130	205	65	Surcharge - late filing fee or oath	
127	50	227	25	Surcharge - late provisional filing fee or cover sheet	
139	130	139	130	Non-English specification	
147	2,520	147	2,520	For filing a request for <i>ex parte</i> reexamination	
112	920*	112	920*	Requesting publication of SIR prior to Examiner action	
113	1,840*	113	1,840*	Requesting publication of SIR after Examiner action	
115	110	215	55	Extension for reply within first month	
116	390	216	195	Extension for reply within second month	
117	890	217	445	Extension for reply within third month	
118	1,390	218	695	Extension for reply within fourth month	
128	1,890	228	945	Extension for reply within fifth month	
119	310	219	155	Notice of Appeal	
120	310	220	155	Filing a brief in support of an appeal	
121	270	221	135	Request for oral hearing	
138	1,510	138	1,510	Petition to institute a public use proceeding	
140	110	240	55	Petition to revive - unavoidable	
141	1,240	241	620	Petition to revive - unintentional	
142	1,240	242	620	Utility issue fee (or reissue)	
143	440	243	220	Design issue fee	
144	600	244	300	Plant issue fee	
122	130	122	130	Petitions to the Commissioner	
123	130	123	130	Petitions related to provisional applications	
126	180	126	180	Submission of Information Disclosure Stmt	
581	40	481	40	Recording each patent assignment per property (times number of properties)	40.00
146	710	246	355	Filing a submission after final rejection (37 CFR 1.129(a))	
149	710	249	355	For each additional invention to be examined (37 CFR 1.129(b))	
179	710	279	355	Request for Continued Examination (RCE)	
169	900	169	900	Request for expedited examination of a design application	

Other fee (specify):

Other fee (specify):

\*Reduced by Basic Filing Fee Paid

**SUBTOTAL (3) (\$)** 40.00**SUBMITTED BY**

Name (Print/Type) Albert J. Fasulo, II

Registration No. (Attorney/Agent)

43,607

**Complete (if applicable)**

Telephone

202-371-2600

Signature

Albert J. Fasulo, II

Date

April 11, 2001

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

## Certificate Under 37 C.F.R. § 3.73(b)

Applicant/Patent Owner: Broadcom Corporation

Application No./Patent No.: To be assigned Filed/Issue Date: HEREWITH

Entitled: Noise Feedback Coding Method and System for Efficiently Searching Vector Quantization Codevectors Used for Coding a Speech Signal

Broadcom Corporation, a Corporation

(Name of Assignee)

(Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest, or
2. ☐ an assignee of an undivided part interest

in the patent application/patent identified above by virtue of either:

- A. ☒ An Assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s) of the patent application/patent identified above to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
2. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.
3. From: \_\_\_\_\_ To: \_\_\_\_\_  
The document was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet.

☐ Copies of assignments or other documents in the chain of title are attached.

**[NOTE:]** A separate copy (*i.e.*, the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the PTO. See MPEP 302-302.8]

The undersigned (whose title is supplied below) is empowered to act on behalf of the assignee.

Date: April 5, 2001

Name: WILLIAM J. RUEHLER

Title: VICE PRESIDENT & CFO

Signature: [Signature]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Juin-Hwey Chen

Appl. No. To be assigned

Filed: HEREWITH

For: **Noise Feedback Coding Method  
and System for Efficiently  
Searching Vector Quantization  
Codevectors Used for Coding a  
Speech Signal**

Confirmation No. N/A

Art Unit: To be assigned

Examiner: To be assigned

Atty. Docket: 1875.0250002/RES/AJF



**Authorization To Treat A Reply As Incorporating An Extension Of  
Time Under 37 C.F.R. § 1.136(a)(3)**

Commissioner for Patents  
Washington, D.C. 20231

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply. A duplicate copy of this authorization is enclosed.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Albert J. Fasulo, II  
Attorney for Applicant  
Registration No. 43,607

Date: April 11, 2001

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RES/AJF:vrh  
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